EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	509	(546/123,514/300).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/25 08:47
L2	319	I1 and naphthyridine	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/25 08:47
L3	18	l2 and phosphodiesterase	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/25 08:48

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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS
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         JUL 02
                 SCISEARCH enhanced with complete author names
NEWS
         JUL 02
                CHEMCATS accession numbers revised
     5
         JUL 02 CA/CAplus enhanced with utility model patents from China
NEWS
NEWS 6
         JUL 16 CAplus enhanced with French and German abstracts
         JUL 18 CA/CAplus patent coverage enhanced
NEWS
     7
        JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
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NEWS 11
        AUG 06 FSTA enhanced with new thesaurus edition
NEWS 12 AUG 13 CA/CAplus enhanced with additional kind codes for granted
                 patents
NEWS 13 AUG 20
                 CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 14 AUG 27
                 Full-text patent databases enhanced with predefined
                 patent family display formats from INPADOCDB
NEWS 15 AUG 27
                 USPATOLD now available on STN
                 CAS REGISTRY enhanced with additional experimental
NEWS 16 AUG 28
                 spectral property data
NEWS 17
         SEP 07
                 STN AnaVist, Version 2.0, now available with Derwent
                 World Patents Index
NEWS 18
         SEP 13
                 FORIS renamed to SOFIS
                 INPADOCDB enhanced with monthly SDI frequency
NEWS 19
         SEP 13
NEWS 20
         SEP 17
                 CA/CAplus enhanced with printed CA page images from
                 1967-1998
NEWS 21
         SEP 17
                 CAplus coverage extended to include traditional medicine
                 patents
NEWS 22
         SEP 24
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 23
         OCT 02
                 CA/CAplus enhanced with pre-1907 records from Chemisches
                 Zentralblatt 
        OCT 19
NEWS 24
                 BEILSTEIN updated with new compounds
NEWS EXPRESS
             19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
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FULL ESTIMATED COST

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chain nodes :
17 18 19 20 21 22 23 24 25 27
ring nodes :
1 2 3 4 5 6 7 8
                     9 10 11 12 13 14 15 16
chain bonds :
2-25 3-24 4-23 7-17 8-18 9-22 10-11 13-21 18-19
                                                 18-20 19-27
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 11-16 12-13 13-14
14-15 15-16
exact/norm bonds :
5-7 6-10 7-8 7-17 8-9 9-10 10-11 13-21 18-19 18-20 19-27
exact bonds :
2-25 3-24 4-23 8-18 9-22
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16
isolated ring systems :
containing 1 : 11 :
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G1:H,Ak

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:Atom 22:CLASS 23:CLASS 24:CLASS 25:CLASS 27:CLASS

=> d 11

L1 HAS NO ANSWERS .

L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 11

G1 H,Ak

SAMPLE SEARCH INITIATED 08:50:23 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -86 TO ITERATE

100.0% PROCESSED 86 ITERATIONS

7 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** **COMPLETE** BATCH

PROJECTED ITERATIONS: 1164 TO 2276

PROJECTED ANSWERS: 7 TO 298

L2 7 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 08:50:27 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1888 TO ITERATE

100.0% PROCESSED 1888 ITERATIONS 171 ANSWERS

SEARCH TIME: 00.00.01

L3171 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

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L4 10 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2007:486169 CAPLUS

DOCUMENT NUMBER:

146:462241

TITLE:

Process for the preparation of 1-aryl-4-oxo-1,4-

dihydro-1,8-naphthyridine-3-carboxamide derivatives as

phosphodiesterase-4 inhibitors

INVENTOR(S):

Cameron, Mark; Hartner, Frederick W.; Tan, Lushi;

Yasuda, Nobuyoshi; Yoshikawa, Naoki

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA PCT Int. Appl., 59pp.

SOURCE: PCT Int. Appl., 5
CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

GI

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

1		'ENT I	_			KIN	D	DATE		APPLICATION NO.						DATE			
		2007050576					2 20070503 WO 2006-US41424							20061024					
7	WO	2007050576			A 3		20070628												
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GΕ,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	
			KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	
			MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	
			RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	TR,	TT,	
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			KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑP,	EA,	EP,	OA							
PRIOR	PRIORITY APPLN. INFO.:									US 2005-730596P						P 20051027			
OTHER SOURCE(S):						CASREACT 146:462241													

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a process for the preparation of a compound of structural formula I, which is a phosphodiesterase-4 inhibitor, and related derivs. The preparation of I can be illustrated by the following example. Coupling of 1-bromo-3-fluoro-4-iodobenzene with vinylmagnesium chloride in the presence of ZnCl2 and a palladium catalyst gave 1-bromo-3-fluoro-4-vinylbenzene, which underwent stereoselective cyclopropanation with Et diazoacetate in the presence of copper triflate and a chiral bisoxazoline ligand to give cyclopropane II. Compound II was hydrolyzed with LiOH, recrystd. to sep. it from the cis-isomer, and esterified with ethanol and thionyl chloride to give pure trans-isomer II (99% ee). Boronic acid III was converted to the pinacol boronate ester with pinacol in toluene and this intermediate underwent amidation with cyclopropylamine, in the presence of MgCl2, and acid hydrolysis to give boronic acid IV. Suzuki coupling of IV with II in DMF and n-propanol using Na2CO3 as a buffer, followed by ester hydrolysis with NaOH in methanol and deprotonation with NaOH gave sodium salt I.

IT 934995-86-5P 934995-87-6P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; process for preparation of arylnaphthyridinonecarboxamide derivs. as phosphodiesterase-4 inhibitors)

RN 934995-86-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 934995-87-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2R)- (CA INDEX NAME)

Absolute stereochemistry.

IT 934995-88-7P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(target compound; process for preparation of arylnaphthyridinonecarboxamide derivs. as phosphodiesterase-4 inhibitors)

RN 934995-88-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, sodium salt (1:1), (1R,2R)- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2007:484710 CAPLUS

DOCUMENT NUMBER:

146:482049

TITLE:

A 4-oxo-1-(3-substituted phenyl)-1,4-dihydro-1,8-naphthyridine-3-carboxamide phosphodiesterase-4-

inhibitor and a method of preparing it and its use in

the treatment of asthma and inflammation

INVENTOR(S):

Dube, Daniel; Gallant, Michel; Lacombe, Parick

Merck Frosst Canada Ltd., Can.

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 61pp.

2001.021

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

INT • 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE					ION 1			D		
WO	2007048225				A1		2007	0503	١				20061023				
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		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
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		KG,	KZ,	MD,	RU,	TJ,	TM										
បន	US 2007099951						2007	0503	1	US 2	006-	5826	97		2	0061	018
PRIORIT	PRIORITY APPLN. INFO.:								1	US 2	005-	7306	21P]	P 2	0051	027
GI																	

AB The current application is directed to a compound of the structural formula I, crystal form and crystalline free acid thereof, pharmaceutical compns. comprising these compds. and methods of preparing same. These compds. are phosphodiesterase-4 inhibitors and are useful in the treatment of asthma and inflammation and are useful for the enhancement of cognition. Compound I was prepared by a multistep procedure (procedure given). The compound of the invention was evaluated for it's PDE-4 inhibitory activity.

IT 935674-06-9P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of oxo(phenyl)dihydronaphthyridinecarboxamide as phosphodiesterase-4 inhibitor and their use in the treatment of asthma,

inflammation, and enhancement of cognition)

RN 935674-06-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, sodium salt (1:1), (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

IT 702639-63-2P 935674-10-5P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of oxo(phenyl)dihydronaphthyridinecarboxamide as phosphodiesterase-4 inhibitor and their use in the treatment of asthma, inflammation, and enhancement of cognition)

RN 702639-63-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 935674-10-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:59080 CAPLUS

DOCUMENT NUMBER:

144:318791

TITLE:

Preparation and Solid-State Characterization of

Nonstoichiometric Cocrystals of a Phosphodiesterase-IV

Inhibitor and L-Tartaric Acid

AUTHOR(S):

Variankaval, Narayan; Wenslow, Robert; Murry, Jerry; Hartman, Robert; Helmy, Roy; Kwong, Elizabeth; Clas,

Sophie-D.; Dalton, Chad; Santos, Ivan

CORPORATE SOURCE: Merck Research Laboratories, Merck & Co., Rahway, NJ,

07065, USA

SOURCE: Crystal Growth & Design (2006), 6(3), 690-700

CODEN: CGDEFU; ISSN: 1528-7483

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

Evidence for a series of nonstoichiometric, isostructural, cocryst. complexes of L-883555, a phosphodiesterase-IV inhibitor, and L-tartaric acid with stoichiometries ranging from 0.3:1 to 0.9:1 is reported here. The free base form of this compound had insufficient bioavailability and, hence, could not be developed as a candidate for safety assessment studies. Several L-tartaric acid complexes were produced during an attempted salt-formation process, with the objective of increasing the bioavailability. It was found that the amount of L-tartaric acid incorporated in the cocryst. complexes could be controlled by adjusting the acid:base ratio in the reaction mixture without accompanying proton transfer between acid and base. Spectroscopic techniques were employed to locate the site of intermol. interaction between the acid and base as the N-oxide group in the base and the carboxylic acid of L-tartaric acid. Thermal and spectroscopic anal. of the degradation behavior for the various complexes showed the existence of at least two types of binding between the acid and base in those complexes with stoichiometries >0.5:1. canonical hemitartrate complex was found to be more thermally stable than the other complexes, with acid:base stoichiometries lesser than or greater than 0.5:1 and was found to have much higher bioavailability than the free base in rhesus monkeys. This work shows the potential of designing suitable cocryst. complexes driven by favorable interactions between an acid and base in cases where conventional proton transfer does not occur to form a true salt, offering a route toward increased bioavailability in poorly absorbed compds.

IT 477252-51-0D, L 883555, complex with L-tartaric acid
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)

(preparation and solid-state characterization of nonstoichiometric cocrystals of a phosphodiesterase-IV inhibitor and L-tartaric acid) 477252-51-0 CAPLUS

1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN

CN

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:510348 CAPLUS

DOCUMENT NUMBER: 143:193927

TITLE: Practical application of new catalytic methods: a concise synthesis of a potent PDE IV inhibitor

AUTHOR(S):

Albaneze-Walker, Jennifer; Murry, Jerry A.; Soheili, Arash; Ceglia, Scott; Springfield, Shawn A.; Bazaral,

Charles; Dormer, Peter G.; Hughes, David L.

CORPORATE SOURCE:

Process Research, Merck Research Laboratories, Merck

and Co., Inc., Rahway, NJ, 07065, USA

Tetrahedron (2005), 61(26), 6330-6336 CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER:

Elsevier B.V.

DOCUMENT TYPE:

Journal

LANGUAGE:

SOURCE:

English

OTHER SOURCE(S):

CASREACT 143:193927

GI

AB An efficient synthesis of a potent PDE IV inhibitor I is described. The synthesis is highlighted by two practical and efficient catalytic reactions: a highly selective catalytic palladium mediated carbonylation of the pyridine side chain and an efficient palladium-catalyzed Suzuki-Miyaura coupling of a chloropyridine-N-oxide.

IT 477252-51-0P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(scalable preparation of (cyclopropylcarbamoyl)(oxidopyridylphenyl)naphthyri done as PDE IV inhibitor using regioselective carbonylation and Suzuki-Miyaura cross-coupling as key steps)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

20

REFERENCE COUNT:

THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:1059128 CAPLUS DOCUMENT NUMBER: 142:32997

TITLE: Use of phosphatase inhibitors as adjunct therapy for

psychiatric disorders

INVENTOR(S): Scolnick, Edward M.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL	ICAT:					ATE			
WO	2004105698				A2		20041209			WO 2				-		525			
WO	2004	2004105698			A3		20050602												
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		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
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							TR,									•	•		
US	2006	2586	68		A1		2006	1116		US 2	005-	5576	48		2	0051	118		
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										WO 2	004-1	US16	492	Ţ	v 2	0040	525		
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	ovide																		

AB The use of a phosphatase inhibitor in conjunction with psychotherapy provides enhanced therapeutic results in the treatment of psychiatric disorders including, for example, specific phobias, panic disorders, anxiety disorders including posttraumatic stress disorders, and obsessive-compulsive disorder. The phosphatase that is inhibited can be calcineurin or protein phosphatase 1. Treatment with a phosphatase inhibitor can be combined with a phosphodiesterase 4 inhibitor.

TT 701263-25-4P, N-Cyclopropyl-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]-1,4-dihydro-1,8-naphthyridine-3-carboxamide 702640-57-1P 702640-64-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; use of phosphatase inhibitors such calcineurin and protein phosphatase 1 as adjunct therapy for psychiatric disorders combined with phosphodiesterase 4 inhibitors)

RN 701263-25-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (CA INDEX NAME)

RN 702640-57-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2S)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-64-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

```
702639-56-3P, 2-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-
IT
     naphthyridin-1(4H)-yl]-1,1'-biphenyl-4-yl]-2-methylpropanoic acid
     702639-58-5P 702639-59-6P 702639-63-2P,
     2-trans-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-
     yl]-3-fluoro-1,1'-biphenyl-4-yl]cyclopropanecarboxylic acid
     702639-69-8P, 2-trans-[3-Chloro-3'-[3-[(cyclopropylamino)carbonyl]-
     4-oxo-1,8-naphthyridin-1(4H)-yl]-1,1'-biphenyl-4-yl]cyclopropanecarboxylic
     acid 702639-71-2P, 2-cis-[3'-[3-[(Cyclopropylamino)carbonyl]-4-
     oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro-1,1'-biphenyl-4-
     yl]cyclopropanecarboxylic acid 702639-90-5P,
     (+)-trans-2-[3-Fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-
     1,8-naphthyridin-1(4H)-yl]biphenyl-4-yl]cyclopropanecarboxylic acid
     702639-91-6P 702639-93-8P, trans-2-[3'-[3-
     [(Cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]biphenyl-4-
     yl]-2-methylcyclopropanecarboxylic acid 702639-95-0P,
     2-trans-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-
     yl]-1,1'-biphenyl-4-yl]cyclopropanecarboxylic acid 702639-96-1P,
     3-Methyl-3-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-
     naphthyridin-1(4H)-yl]biphenyl-4-yl]butanoic acid 702639-98-3P
     702640-04-8P, (+)-trans-2-[3-Chloro-3'-[3-
     [(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]biphenyl-4-
     yl]cyclopropanecarboxylic acid 702640-06-0P,
     (-)-trans-2-[3'-[4-0xo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-
     naphthyridin-1(4H)-yl]biphenyl-4-yl]cyclopropanecarboxylic acid
     702640-13-9P, 3-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-
     naphthyridin-(4H)-yl]biphenyl-4-yl]-2,2-dimethylpropanoic acid
     702640-28-6P, 4-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-
     naphthyridin-(4H)-yl]biphenyl-4-yl]-3,3-dimethylbutanoic acid
     702640-30-0P, 1-[[3'-[4-0xo-3-[[(2,2,2-
     trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]biphenyl-4-
     yl]methyl]cyclobutanecarboxylic acid 702640-35-5P,
     2,2-Dimethyl-4-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-
     naphthyridin-1(4H)-yl]biphenyl-4-yl]butanoic acid
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (use of phosphatase inhibitors such calcineurin and protein phosphatase
```

1 as adjunct therapy for psychiatric disorders combined with

phosphodiesterase 4 inhibitors)

CN [1,1'-Biphenyl]-4-propanoic acid, $3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-<math>\beta$, β -dimethyl- (CA INDEX NAME)

RN 702639-58-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

RN 702639-59-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2S)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-69-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-71-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2S)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-90-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702639-91-6 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 702639-93-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2-methyl-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-95-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-96-1 CAPLUS
CN [1,1'-Biphenyl]-4-propanoic acid, β,β-dimethyl-3'-[4-oxo-3[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (CFINDEX NAME)

$$Me$$
 Me
 N
 N
 $C-NH-CH_2-CF_3$

RN 702639-98-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-04-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-

[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-06-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 702640-13-9 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, $3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-<math>\alpha$, α -dimethyl- (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2 \\ Me \\ \end{array}$$

RN 702640-28-6 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- β , β -dimethyl- (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-CH_2-C-CH_2 \\ Me \\ \end{array}$$

RN 702640-30-0 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 702640-35-5 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, α, α -dimethyl-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]-INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{HO}_2\text{C}-\text{C}-\text{CH}_2-\text{CH}_2 \\ \text{Me} \\ \end{array}$$

ANSWER 6 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:467891 CAPLUS

DOCUMENT NUMBER: TITLE:

141:38597

Preparation of aryl substituted 1,8-naphthyridin-4(1H)-

ones as inhibitors of phosphodiesterase-4

INVENTOR(S):

Albaneze-Walker, Jennifer; Murry, Jerry Anthony;

Soheili, Arash; Springfield, Shawn A.

PATENT ASSIGNEE(S):

SOURCE:

Merck & Co., Inc., USA

PCT Int. Appl., 142 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent

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FAMILY ACC. NUM. COUNT:

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WO	2004		A2	-	2004	 0610	1	WO 2003-US36806						20031118					
WO 2004048377				A 3		20040902													
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
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		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,		
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		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	

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                                            EP 2003-783636
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PRIORITY APPLN. INFO.:
                                           US 2002-428315P
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                                                               P 20030522
                                           US 2003-472655P
                                                               W 20031118
                                           WO 2003-US36806
OTHER SOURCE(S):
                        MARPAT 141:38597
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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AB
     In one aspect, the present invention is directed to a one pot method of
     preparing intermediates I [OR1 = a suitable leaving group; R3 =
     (un) substituted alkyl, aryl, heteroaryl], which are useful in making
     inhibitors of phosphodiesterase-4. The present invention is also directed
     to a method of preparing phosphodiesterase inhibitors (no biol. data given)
     comprising the compds. II and III which comprises reacting IV [OR] as
     above] with a 3-bromopyridine-N-oxide. HCl or 3-bromopyridine in the
     presence of a palladium catalyst and a phosphine ligand in amine base
     followed by reaction of the resulting V or VI with cyclopropylamine,
     optionally in the presence of catalyst. Thus, reacting IV [R1 = Et] with
     a 3-bromopyridine-N-oxide. HCl in the presence of [(allyl)PdCl]2,
     P(tert-Bu)3, tert-amylamine in DMAc followed by reacting V [R1 = Et] with
     cyclopropylamine afforded II. Preparation of 77 aryl substituted
     1,8-naphthyridin-4(1H)-ones and their intermediates is also described.
     477251-83-5P 477251-87-9P 477251-92-6P
IT
     477251-93-7P 477251-95-9P 477251-97-1P
     477251-99-3P 477252-00-9P 477252-01-0P
     477252-05-4P 477252-08-7P 477252-09-8P
     477252-11-2P 477252-23-6P 477252-25-8P
     477252-26-9P 477252-31-6P 477252-32-7P
     477252-36-1P 477252-43-0P 694489-52-6P
     701977-61-9P
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of aryl substituted 1,8-naphthyridin-4(1H)-ones as inhibitors
```

of phosphodiesterase-4)

RN477251-83-5 CAPLUS

CN

1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-87-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo-(CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 694489-52-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 701977-61-9 CAPLU CN [1,1'-Biphenyl]-3-4-oxo-1,8-naphthyr

IT 477251-76-6P 47725 477251-85-7P 47725 477251-94-8P 47725 477252-04-3P 47725 477252-12-3P 47725 477252-15-6P 47725 477252-21-4P 47725 477252-27-0P 47725 477252-33-8P 47725 477252-37-2P 47725 477252-40-7P 47725 477252-46-3P 47725 477252-49-6P 47725 477252-53-2P 47725 477252-56-5P 47725 477252-59-8P 47725 477252-62-3P 47725 477252-65-6P 69448 701977-62-0P RL: PAC (Pharmacol (Therapeutic use); (Uses) (preparation of of phosphodiest RN 477251-76-6 CAPLU CN 1,8-Naphthyridine-

dihydro-N-(1-methy

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2-47-4P 477252-48-5P
2-50-9P 477252-51-0P
-2-54-3P 477252-55-4P
-2-57-6P 477252-58-7P
-2-60-1P 477252-61-2P
2-63-4P 477252-64-5P
9-50-4P 694489-58-2P
ogical activity); SPN (Synthetic preparation); THU
 BIOL (Biological study); PREP (Preparation); USES
aryl substituted 1,8-naphthyridin-4(1H)-ones as inhibitors
.erase-4)
`S
3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
'lethyl)-4-oxo- (CA INDEX NAME)
carboxylic acid, 3'-[3-[[(1-methylethyl)amino]carbonyl]-
:idin-1(4H)-yl]-, ethyl ester (CA INDEX NAME)
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:-NHPr-i

1-82-4P 477251-84-6P 1-88-0P 477251-89-1P 2-02-1P 477252-03-2P 2-06-5P 477252-10-1P 2-13-4P 477252-14-5P 2-16-7P 477252-17-8P 2-22-5P 477252-24-7P 2-28-1P 477252-30-5P 2-34-9P 477252-35-0P 2-38-3P 477252-39-4P 2-41-8P 477252-44-1P

RN 477251-82-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

$$H_2N-S$$
 O
 N
 N
 O
 $C-NH$

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-12-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-17-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-37-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-38-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(CA INDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

$$Me-S-CH_2$$

$$0$$

$$N$$

$$0$$

$$C-NH$$

RN 477252-44-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-46-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (CA INDEX NAME)

RN 477252-47-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-48-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-56-5 CAPLUS

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(CA INDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-64-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-65-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 694489-50-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 694489-58-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 701977-62-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(1,6-dihydro-6-oxo-3-pyridinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:467889 CAPLUS

DOCUMENT NUMBER:

141:38596

TITLE:

Preparation of biphenylnaphthyridonecarboxamides as

phosphodiesterase-4 inhibitors

INVENTOR(S):

Dube, Daniel; Gallant, Michel; Lacombe, Patrick;

Aspiotis, Renee; Dube, Laurence; Girard, Yves;

MacDonald, Dwight

PATENT ASSIGNEE(S):

Merck Frosst Canada & Co., Can.

SOURCE:

PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					KIND		DATE			APPLICATION NO.					DATE				
WO	WO 2004048374			A1 2004061			0610	WO 2003-CA1800						20031119					
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KZ,	LC,	LK,		
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,		
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,		
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		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,		
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,		
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG	

CA	2506	648			A1 20040610 CA 2003-2						2506	648		20031119				
AU	2003	28316	57		A1		2004	0618	AU 2003-283167						20031119			
EP	1565	464			A1	20050824			EP 2003-775029						20031119			
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	GR,	, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY, Z	۹L,	TR,	BG,	CZ,	EE,	HU,	SK		
BR	2003	01645	58		Α		2005	1011	BR 2003-16458						20031119			
CN	1738		Α		2006	0222	CN 2003-80108952						20031119					
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US	2005)2		A1		2005	0519	បះ	S 2004-764229					20040123				
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US	2006	0583	L6		A1		2006	0316	U:	3 2	2005-	5345	82		2	0050	511	
MX	2005	PA054	113		Α		2005	0803	M	Κ 2	2005-	PA54:	13		. 2	0050	520	
NO	2005	00304	16		Α		2005	0727	И	2	2005-	3046			2	0050	621	
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OTHER SOURCE(S):

MARPAT 141:38596

GΙ

$$R^3$$
 R^2
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 R^3
 R^3

AB Title compds. [I; Ar = Ph, pyridyl, pyrimidyl, indolyl, quinolyl, thienyl, pyridonyl, oxazolyl, oxadiazolyl, thiadiazolyl, imidazolyl; Y = CO2R4, ACO2R4, etc.; A = alkyl; R, R4 = H, alkyl; R1 = H, (substituted) alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, heteroaryl, heterocyclyl; R2 = H, halo, cyano, NO2, (substituted) alkyl, cycloalkyl, alkoxy, Ph, heteroaryl, amino, etc.; R3 = H, halo, cyano, NO2, (substituted) alkyl, cycloalkyl, etc.], were prepared Thus, title compound (II) (preparation outlined) inhibited

PDE4-mediated hydrolysis of cAMP to AMP with IC50 = 0.1 nM.

ΙT 702639-52-9P 702639-53-0P 702639-54-1P 702639-55-2P 702639-56-3P 702639-57-4P 702639-58-5P 702639-59-6P 702639-60-9P 702639-61-0P 702639-62-1P 702639-63-2P 702639-64-3P 702639-65-4P 702639-66-5P 702639-67-6P 702639-69-8P 702639-71-2P 702639-73-4P 702639-76-7P 702639-78-9P 702639-80-3P 702639-81-4P 702639-83-6P 702639-85-8P 702639-86-9P 702639-88-1P 702639-90-5P 702639-91-6P 702639-93-8P 702639-95-0P 702639-96-1P 702639-98-3P 702640-00-4P 702640-02-6P 702640-04-8P 702640-06-0P 702640-08-2P 702640-10-6P 702640-12-8P 702640-13-9P 702640-15-1P 702640-16-2P 702640-17-3P 702640-18-4P 702640-19-5P 702640-20-8P 702640-21-9P phosphodiesterase-4 inhibitors) RN 702639-52-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-53-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]-, (1R,2R)-rel- (CA INDEX NAME)

RN 702639-54-1 CAPLUS

CN [1,1'-Biphenyl]-3-acetic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl- (CA INDEX NAME)

RN 702639-55-2 CAPLUS

CN [1,1'-Biphenyl]-4-acetic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl- (CA INDEX NAME)

RN 702639-56-3 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, $3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-<math>\beta$, β -dimethyl- (CA INDEX NAME)

RN 702639-57-4 CAPLUS

CN [1,1'-Biphenyl]-4-acetic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α -hydroxy- (CA INDEX NAME)

RN 702639-58-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

RN 702639-59-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2S)-rel- (CA INDEX NAME)

RN 702639-60-9 CAPLUS

CN 1,3-Dioxolane-4-carboxylic acid, 5-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl- (CA INDEX NAME)

RN 702639-61-0 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 702639-62-1 CAPLUS

CN Cyclopropanecarboxylic acid, 1-cyano-3-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl- (CA INDEX NAME)

RN 702639-63-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-64-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]-, (1R,2S)-rel- (CA INDEX NAME)

RN 702639-65-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-bromo-5'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-66-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-methyl[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

RN 702639-67-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-2-methyl[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-69-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

RN 702639-71-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2S)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-73-4 CAPLUS

CN [1,1'-Biphenyl]-4-carboxylic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- (CA INDEX NAME)

RN 702639-76-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-78-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[[2-(methylthio)ethyl]amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

RN 702639-80-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[[2-(methylsulfonyl)ethyl]amino]car bonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-81-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

RN 702639-83-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[5-[3-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-2-thienyl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-85-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(cyclopropylmethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

RN 7.02639-86-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-cyanocyclopropyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-88-1 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, β , β -dimethyl-3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- (CA INDEX NAME)

RN 702639-90-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702639-91-6 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 702639-93-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2-methyl-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-95-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-96-1 CAPLUS

CN [1;1'-Biphenyl]-4-propanoic acid, β , β -dimethyl-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (CA INDEX NAME)

$$HO_2C-CH_2-C$$
 Me
 N
 N
 $C-NH-CH_2-CF_3$

RN 702639-98-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-00-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,3,3,3-pentafluoropropyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

RN 702640-02-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-1-fluoro-, (1R,2S)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702640-04-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-06-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 702640-08-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-10-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1-methylethyl ester, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-12-8 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 702640-13-9 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, $3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-<math>\alpha$, α -dimethyl- (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2 \\ \hline Me \\ \hline \\ N \\ \hline \\ N \\ \hline \\ C-NH \\ \hline \end{array}$$

ŔN 702640-15-1 CAPLUS

CN [1,1'-Biphenyl]-3-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-α,α-dimethyl- (CA INDEX NAME)

RN 702640-16-2 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]methyl]- (CA INDEX NAME)

RN 702640-17-3 CAPLUS

CN [1,1'-Biphenyl]-2-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl- (CA INDEX NAME)

RN 702640-18-4 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]methyl]- (CA INDEX NAME)

RN 702640-19-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1,1-dimethylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)-(CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-20-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclobutylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-21-9 CAPLUS

CN Bicyclo[1.1.1]pentane-1-carboxylic acid, 3-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

RN 702640-22-0 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- γ -hydroxy- γ -methyl- (CA INDEX NAME)

$$HO_2C-CH_2-CH_2-C$$
 Me
 N
 N
 O
 $C-NH$

RN 702640-23-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[[(1R,2S)-2-fluorocyclopropyl]amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-24-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(dicyclopropylmethyl)amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-25-3 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, $3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-\alpha,\alpha-dimethyl- (CA INDEX NAME)$

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2-CH_2 \\ Me \\ \end{array}$$

RN 702640-26-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-hydroxycyclopropyl)amino]carbon yl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-27-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(1-phenylcyclopropyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-28-6 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- β , β -dimethyl- (CA INDEX NAME)

RN 702640-29-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-cyclopropyl-1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-30-0 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 702640-31-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(cyclopropylmethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)-(CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-32-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[3-[[(1-hydroxycyclopropyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 702640-33-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoro-1-methylethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-34-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-methylcyclopropyl)amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-35-5 CAPLUS
CN [1,1'-Biphenyl]-4-butanoic acid, α , α -dimethyl-3'-[4-oxo-3-[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (CA

INDEX NAME)

RN 702640-36-6 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, α,α -dimethyl-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2 \\ \hline Me \\ \hline Me \\ \hline \\ O \\ O \\ \end{array}$$

RN 702640-37-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

IT 702640-46-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

 $(preparation\ of\ biphenylnaphthyridonecarboxamides\ as\ phosphodiesterase-4\ inhibitors)$

RN 702640-46-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

TT 701263-25-4 702640-57-1 702640-59-3 702640-62-8 702640-64-0 702640-66-2 702640-70-8 702640-74-2 702640-76-4 702640-77-5 702640-79-7 RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of biphenylnaphthyridonecarboxamides as phosphodiesterase-4 inhibitors)

RN 701263-25-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (CA INDEX NAME)

RN 702640-57-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2S)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-59-3 CAPLUS

CN 1,3-Dioxolane-4-carboxylic acid, 5-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl-, ethyl ester (CA INDEX NAME)

RN 702640-62-8 CAPLUS

CN Cyclopropanecarboxylic acid, 1-cyano-3-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 702640-64-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-66-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-bromo-5'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-70-8 CAPLUS

CN [1,1'-Biphenyl]-4-carboxylic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-, ethyl ester (CA INDEX NAME)

RN 702640-74-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[[2-(methylthio)ethyl]amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-76-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (CA INDEX NAME)

RN 702640-77-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-79-7 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]-, ethyl ester (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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2

ACCESSION NUMBER:

2004:467741 CAPLUS

DOCUMENT NUMBER:

141:38595

TITLE:

Preparation of substituted naphthyridine

phosphodiesterase-4 inhibitors as enhancers of

cognition

INVENTOR(S):

Dube, Daniel; Gallant, Michel; Lacombe, Patrick; Girard, Yves; MacDonald, Dwight; Friesen, Richard; Ducharme, Yves; Cote, Bernard; Blouin, Marc; Martins, Evelyn; Guay, Daniel; Girard, Mario; Frenette,

Evelyn; Guay, Daniel; Girard, Mario; Frenette, Richard; Laliberte, Sebastien; Robichaud, Annette;

Mastracchio, Anthony; Perrier, Helene

PATENT ASSIGNEE(S):

Merck Frosst Canada & Co., Can.; Hamel, Pierre

SOURCE:

PCT Int. Appl., 138 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

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1

FAMILY ACC. NUM. COUNT:

	PATENT NO.					KIND DATE			APPLICATION NO.						DATE				
	WO 2004047836					A1 20040610			WO 2003-CA1799						20031119				
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			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,	
			GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚŻ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
			PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,	
									UZ,										
		RW:							MZ,										
	•		ΒY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
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PRIORITY APPLN. INFO.:									US 2002-428541P					1	P 20021122				
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AB Substituted naphthyridines are prepared as PDE-4 inhibitors. For instance, Et 3-(3-bromoanilino)-2-(2-chloronicotinoyl)acrylate (preparation given) is treated with NaH in THF to give Et 1-(3-bromophenyl)-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxylate. This intermediate is saponified, coupled to i-PrNH2 (THF, Et3N, i-BuOCOCl) and coupled to 3-acetylphenylboronic acid (PhMe, EtOH, Na2CO3, trans-dibromobis(triphenylphosphine)palladium, reflux, 1 h) to give I. Example compds. have IC50 values of 0.1 to 90.0 nM for PDE4; these compds. are useful for enhancing memory, learning, retention, recall, awareness and judgement.

IT 477251-83-5P, N-Isopropyl-1-[3-(4-acetylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-87-9P,
N-Isopropyl-1-[3-(pyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one3-carboxamide 477251-91-5P, N-(2,6-Dichloropyridin-4-yl)-1-[3(pyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477251-92-6P 477251-93-7P, N-Isopropyl-1-[3-(quinolin-3yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477251-95-9P, N-Cyclopropyl-1-[3-(pyridin-3-yl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-97-1P,

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N-Isopropyl-1-[3-[5-(methylsulfanyl)pyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-99-3P,
N-Cyclopropyl-1-[3-(4-hydroxymethylphenyl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-00-9P,
N-Cyclopropyl-1-[3-(pyridin-4-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-
one-3-carboxamide 477252-01-0P, N-Cyclopropyl-1-[3-[4-
(ethylsulfanyl)phenyl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-05-4P, N-Isopropyl-1-[3-[4-
(methylsulfanyl)phenyl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-07-6P, N-Isopropyl-1-[3-(5-carboethoxypyridin-
3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-08-7P, N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)pyridin-
3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-09-8P, N-Isopropyl-1-[3-[6-(2-methylpropyl)pyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-10-1P 477252-11-2P, N-Isopropyl-1-[3-(6-
methylpyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-23-6P, N-Cyclopropyl-1-[3-(6-methylpyridin-3-
yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-25-8P, N-Cyclopropyl-1-[3-(5-bromopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-26-9P,
N-Cyclopropyl-1-[3-(6-benzyloxypyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-31-6P.
N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)pyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-32-7P,
N-Cyclopropyl-1-[5-bromo-3-[6-(1-hydroxy-1-methylethyl)pyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-35-0P, N-Cyclopropyl-1-[3-(6-methylsulfonylpyridin-3-
yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-43-0P, N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1-
methylethyl)pyridin-3-yl]pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-
4-one-3-carboxamide
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
   (preparation of substituted naphthyridine phosphodiesterase-4 inhibitors as
   enhancers of cognition)
477251-83-5 CAPLUS
1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)
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RN

CN

RN 477251-87-9 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-91-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo-(CA INDEX NAME)

RN 477252-07-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester (CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

IT 477251-76-6P, N-Isopropyl-1-[3-(3-acetylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-80-2P, N-(2,6-Dichloropyridin-4-yl)-1-[3-(3-acetylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-82-4P 477251-84-6P, N-Isopropyl-1-[3-(2-methylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-85-7P, N-Isopropyl-N-methyl-1-[3-(4-acetylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-88-0P, N-Isopropyl-1-[3-(indol-5-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477251-89-1P, N-tert-Butyl-1-[3-(4acetylphenyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-94-8P, N-Isopropyl-1-[3-(pyrimidin-5-yl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-02-1P, N-Cyclopropyl-1-[3-(3-thienyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-03-2P, N-Cyclopropyl-1-[3-(4sulfamoylphenyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-04-3P, N-Isopropyl-1-[3-(3-ethoxyphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-06-5P, N-Isopropyl-1-[3-(3-acetyl-4-hydroxyphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-12-3P, N-Cyclopropyl-1-[3-(1-oxidopyrimidin-5-yl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-13-4P, 1-[3-[6-(1-Hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-14-5P 477252-15-6P, N-Cyclopropyl-1-[3-(5-methylsulfonylpyridin-3yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-16-7P, N-Cyclopropyl-1-[3-[4-(1-hydroxy-1-methylethyl)-1oxidopyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-17-8P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1methylethyl)pyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-18-9P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1methylethyl)pyridin-4-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-19-0P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1methylethyl)-1-oxidopyridin-4-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4one-3-carboxamide 477252-21-4P, N-Cyclopropyl-1-[3-(6isopropylsulfonylpyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-22-5P, N-Cyclopropyl-1-[3-(6-methoxypyridin-3yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-24-7P, N-Cyclopropyl-1-[3-[6-(2,2,2-trifluoroethoxy)pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide

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477252-27-0P, N-Cyclopropyl-1-[3-[6-(bis(cyclopropyl)(hydroxy)meth
yl)-1-oxidopyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-28-1P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1-
methylethyl)-1-oxidopyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-
one-3-carboxamide 477252-30-5P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-
1-methylethyl)pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-33-8P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-
methylethyl)pyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-34-9P 477252-36-1P.
N-Isopropyl-1-[3-(5-methylsulfonylpyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-37-2P,
N-Cyclopropyl-1-[3-[4-(ethylsulfonyl)phenyl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-38-3P,
N-Cyclopropyl-1-[3-[4-(ethylsulfinyl)phenyl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-39-4P
477252-40-7P 477252-41-8P, N-Cyclopropyl-1-[3-[4-
[(methylsulfonyl)methyl]phenyl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-
3-carboxamide 477252-42-9P, N-Cyclopropyl-1-[3-(1,6-dihydro-6-
oxopyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-44-1P, N-Isopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-45-2P,
N-(2,6-Dichloropyridin-4-yl)-1-[3-(1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-46-3P,
N-Isopropyl-1-[3-(5-carboethoxy-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-47-4P,
N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-
1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-48-5P,
N-Isopropyl-1-[3-[6-(2-methylpropyl)-1-oxidopyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-49-6P,
N-Isopropyl-1-[3-(6-methyl-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-50-9P,
N-Cyclopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-51-0P,
N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-53-2P, N-Cyclopropyl-1-[3-(1-oxidopyridin-4-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-54-3P,
N-Cyclopropyl-1-[3-(5-bromo-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-55-4P,
N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-57-6P, N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1-methylethyl)-1-
oxidopyridin-3-yl]-1-oxidopyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-58-7P,
N-Isopropyl-1-[3-(1-oxidoquinolin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-59-8P,
N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-
1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-60-1P,
N-Cyclopropyl-1-[3-(6-methyl-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-61-2P,
N-Cyclopropyl-1-[3-(6-methylsulfonyl-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-62-3P,
N-Cyclopropyl-1-[5-bromo-3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-63-4P, N-Cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-
1-oxidopyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (preparation of substituted naphthyridine phosphodiesterase-4 inhibitors as
   enhancers of cognition)
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RN 477251-80-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477251-82-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

$$H_2N-S$$
 O
 N
 N
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 C
 C
 N

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-12-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-17-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-18-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-19-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAMÉ)

RN 477252-37-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-38-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(CA INDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

$$Me-S-CH_2$$

$$O$$

$$N$$

$$C-NH$$

.RN 477252-42-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-(1,6-dihydro-6-oxo-3-pyridinyl)phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-44-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-45-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-46-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (CA INDEX NAME)

RN 477252-47-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo-(CAINDEX NAME)

RN 477252-48-5 CAPLUS

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(CA INDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:433770 CAPLUS

DOCUMENT NUMBER:

141:7041

TITLE:

One-pot preparation of naphthyridine derivatives,

useful as inhibitors of phosphodiesterase-4

INVENTOR(S):

Albaneze-Walker, Jennifer; Ceglia, Scott; Murry, Jerry

Anthony; Soheili, Arash

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA

SOURCE:

U.S. Pat. Appl. Publ., 57 pp., which

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004102472 US 6909002	A1 B2	20040527 20050621	US 2003-690118		20031021
PRIORITY APPLN. INFO.:			US 2002-428315P	P	20021122
OTHER SOURCE(S):	CASREA	ACT 141:7041;	US 2003-472598P MARPAT 141:7041	P	20030522

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The invention relates to one-pot preparation of naphthyridine derivs. of formula I [wherein: OR1 is a suitable leaving group; R2 is C1-8alkyl, (un)substituted (hetero)aryl], useful as inhibitors of phosphodiesterase-4 (no biol. data). For instance, naphthyridine derivative II was prepared via heterocyclization of Et 2-chloronicotinoylacetate, 3-bromoaniline, and acetic anhydride, hydrolysis of the obtained ester III (R3 = Br), amidation by isopropylamine, and subsequent phenylacetylation by 3-acetylphenylboronic acid (example 1, no yield data). Naphthyridine derivative IV was prepared using the prepared intermediate III [R3 = -B(OH)2]

(p.

49-53).

IT 477252-05-4P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (one-pot method of preparation of naphthyridine derivs. useful as inhibitors of phosphodiesterase-4)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

IT 477251-76-6P 477251-82-4P 477251-83-5P 477251-84-6P 477251-85-7P 477251-87-9P 477251-88-0P 477251-89-1P 477251-92-6P 477251-93-7P 477251-94-8P 477251-95-9P 477251-97-1P 477251-99-3P 477252-00-9P 477252-01-0P 477252-02-1P 477252-03-2P 477252-04-3P 477252-06-5P 477252-07-6P 477252-08-7P 477252-09-8P 477252-10-1P

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477252-11-2P 477252-13-4P 477252-14-5P
     477252-15-6P 477252-16-7P 477252-21-4P
     477252-22-5P 477252-23-6P 477252-24-7P
     477252-25-8P 477252-26-9P 477252-27-0P
     477252-28-1P 477252-30-5P 477252-31-6P
     477252-32-7P 477252-33-8P 477252-34-9P
     477252-35-0P 477252-36-1P 477252-39-4P
     477252-40-7P 477252-41-8P 477252-43-0P
     477252-64-5P 477252-65-6P 694489-50-4P
     694489-52-6P 694489-53-7P 694489-54-8P
     694489-55-9P 694489-56-0P 694489-57-1P
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (one-pot method of preparation of naphthyridine derivs. useful as inhibitors
        of phosphodiesterase-4)
     477251-76-6 CAPLUS
RN
CN
     1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
     dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)
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RN 477251-82-4 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 477251-83-5 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-87-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo-(CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-07-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester (CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME).

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(CA INDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

$$\begin{array}{c|c} O & & \\ Me-S-CH_2 & & \\ O & & N & O \\ \hline & O & & C-NH \end{array}$$

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-64-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-65-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 694489-50-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 694489-52-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 694489-53-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 694489-54-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 694489-55-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 694489-56-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 694489-57-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3'-(1,6-dihydro-6-oxo-3-pyridinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

IT 701263-25-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(one-pot method of preparation of naphthyridine derivs. useful as inhibitors of phosphodiesterase-4)

RN 701263-25-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (CA INDEX NAME)

ΙT 477252-46-3P 477252-47-4P 477252-48-5P 477252-49-6P 477252-50-9P 477252-51-0P 477252-53-2P 477252-54-3P 477252-55-4P 477252-56-5P 477252-57-6P 477252-58-7P 477252-59-8P 477252-60-1P 477252-61-2P 477252-62-3P 477252-63-4P 694489-58-2P RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (one-pot preparation of naphthyridine derivs., useful as inhibitors of phosphodiesterase-4) RN 477252-46-3 CAPLUS CN 3-Pyridinecarboxylic acid, 5-[3-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (CA INDEX NAME)

RN 477252-47-4 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo-(CAINDEX NAME)

RN 477252-48-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-56-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(CAINDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 694489-58-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

1

ACCESSION NUMBER:

2002:906219 CAPLUS

DOCUMENT NUMBER:

138:4594

TITLE:

Preparation of 1-biaryl-[1,8]naphthyridin-4-one phosphodiesterase IV inhibitors for treatment of

asthma and inflammation

INVENTOR(S):

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WO 2002094823				A1		20021128		WO 2002-CA746							20020522			
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CA 244	CA 2447765					20021128 CA 2002-2447765												
AU 200	AU 2002257459			A1 20021203			AU 2002-257459							20020522				
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AT 303	AT 303384			T	T 20050915			AT 2002-727127							20020522			
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AB Title compds. I [wherein Ar = Ph, pyridyl, pyrimidyl, indolyl, quinolinyl, thienyl, pyridonyl, oxazolyl, oxadiazolyl, thiadiazolyl, imidazolyl, or heteroaryl oxides; R = H or alkyl; R1 = H or (un)substituted (cyclo)alkyl, alkoxy, alkenyl, alkynyl, heteroaryl, or heterocyclyl; R2 = H, halo, (cyclo)alkyl, alkoxy, amino, acyl, alkoxycarbonyl, alkylsulfamoyl, alkylsulfonyl, or (un) substituted Ph, heteroaryl, or heterocyclyl, etc.; R3 = H, OH, NH2, halo, (un) substituted alkyl; R4-R7 = independently H, halo, NH2, or (un) substituted alkyl or alkoxy; or pharmaceutically acceptable salts thereof] were prepared as phosphodiesterase IV (PDE4) inhibitors for the treatment of asthma and inflammation. For instance, Et 3-(3-bromoanilino)-2-(2-chloronicotinoyl)acrylate was cyclized using NaH in THF and the resulting ester saponified to give 1-(3-bromopheny1)-1,4dihydro-[1,8]naphthyridin-4-one-3-carboxylic acid. Amidation with isopropylamine, followed by treatment with 3-acetylphenylboronic acid in the presence of trans-PdBr2(PPh3)2 and Na2CO3 in toluene and EtOH gave II. I demonstrated PDE4 inhibitory activity by suppression of $TNF-\alpha$ secretion in LPS stimulated human blood with IC50 values generally ranging from 0.005 μ M to 15.4 μ M. In a SPA based PDE activity assay, I inhibited the hydrolysis of cAMP to AMP by human recombinant phosphodiesterase IVa with IC50 values between 34.3 nM and 134.0 nM. IT 477251-83-5P, N-Isopropyl-1-[3-(4-acetylphenyl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477251-87-9P, N-Isopropyl-1-[3-(pyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-91-5P, N-(2,6-Dichloropyridin-4-yl)-1-[3-(pyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-92-6P, N-Isopropyl-1-[3-[4-[4-(tert-butyloxycarbonyl)piperazin-1yl]phenyl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-93-7P, N-Isopropyl-1-[3-(quinolin-3-yl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477251-95-9P, N-Cyclopropyl-1-[3-(pyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-97-1P, N-Isopropyl-1-[3-(5-methylthiopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-99-3P, N-Cyclopropyl-1-[3-(4-hydroxymethylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-00-9P, N-Cyclopropyl-1-[3-(pyridin-4-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-01-0P, N-Cyclopropyl-1-[3-(4-ethylthiophenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-05-4P, N-Isopropyl-1-[3-(4-methylthiophenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-07-6P, N-Isopropyl-1-[3-(5-carboethoxypyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-08-7P, N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-09-8P, N-Isopropyl-1-[3-[6-(2-methylpropyl)pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-

[1,8]naphthyridine-3-carboxamide 477252-11-2P, N-Isopropyl-1-[3-(6-methylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-23-6P, N-Cyclopropyl-1-[3-(6-methylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-25-8P, N-Cyclopropyl-1-[3-(5-bromopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8] naphthyridine-3-carboxamide 477252-26-9P, N-Cyclopropyl-1-[3-(6-benzyloxypyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-31-6P, N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)pyridin-3-yl]phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477252-32-7P, N-Cyclopropyl-1-[5-bromo-3-[6-(1-hydroxy-1-methylethyl)pyridin-3yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-35-0P, N-Cyclopropyl-1-[3-(6-methylsulfonylpyridin-3yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-43-0P, N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1methylethyl)pyridin-3-yl]pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (PDE4 inhibitor; preparation of biarylnaphthyridinone PDE4 inhibitors by cyclization and arylation of (arylamino) (nicotinoyl) acrylates for treatment of asthma and inflammation) 477251-83-5 CAPLUS 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-

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RN 477251-87-9 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-91-5 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1;4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-07-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester (CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (CA INDEX NAME)

477252-32-7 CAPLUS

RN

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

IT 477251-76-6P, N-Isopropyl-1-[3-(3-acetylphenyl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477251-80-2P, N-(2,6-Dichloropyridin-4-y1)-1-[3-(3-acetylphenyl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477251-82-4P, N-Isopropyl-1-[3-(4-n-propylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-84-6P, N-Isopropyl-1-[3-(2-methylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-85-7P, N-Isopropyl-N-methyl-1-[3-(4-acetylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8] naphthyridine-3-carboxamide 477251-88-0P, N-Isopropyl-1-[3-(indol-5-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-89-1P, N-tert-Butyl-1-[3-(4acetylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-94-8P, N-Isopropyl-1-[3-(pyrimidin-5-yl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477252-02-1P, N-Cyclopropyl-1-[3-(3-thienyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-03-2P, N-Cyclopropyl-1-[3-(4sulfamoylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-04-3P, N-Isopropyl-1-[3-(3-ethoxyphenyl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477252-06-5P, N-Isopropyl-1-[3-(3-acetyl-4-hydroxyphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-10-1P,

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N-Isopropyl-1-[3-(5-acetylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-12-3P,
N-Cyclopropyl-1-[3-(1-oxidopyrimidin-5-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-13-4P,
1-[3-[6-(1-Hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-4-oxo-1,4-
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N-Isopropyl-1-[3-[4-(pyridin-3-yl)phenyl]phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-15-6P,
N-Cyclopropyl-1-[3-(5-methylsulfonylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-16-7P,
N-Cyclopropyl-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxidopyridin-2-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-17-8P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1-
methylethyl)pyridin-2-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-18-9P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1-
methylethyl)pyridin-4-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-19-0P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1-
methylethyl)-1-oxidopyridin-4-yl]phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-21-4P,
N-Cyclopropyl-1-[3-(6-isopropylsulfonylpyridin-3-yl)phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-22-5P,
N-Cyclopropyl-1-[3-(6-methoxypyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-24-7P,
N-Cyclopropyl-1-[3-[6-(2,2,2-trifluoroethoxy)pyridin-3-yl]phenyl]-4-oxo-
1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-27-0P,
N-Cyclopropyl-1-[3-[6-dicyclopropyl(hydroxy)methyl-1-oxidopyridin-3-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-28-1P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)-1-
oxidopyridin-2-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-30-5P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-
methylethyl)pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-33-8P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-
methylethyl)pyridin-2-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-34-9P, N-Isopropyl-1-[3-(4-
methylsulfonylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-36-1P, N-Isopropyl-1-[3-(5-
methylsulfonylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-37-2P, N-Cyclopropyl-1-[3-(4-
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carboxamide 477252-38-3P, N-Cyclopropyl-1-[3-(4-
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oximidoethyl)phenyl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
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477252-41-8P, N-Cyclopropyl-1-[3-[4-(methylsulfonylmethyl)phenyl]p
henyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-42-9P, N-Cyclopropyl-1-[3-(1,6-dihydro-6-oxopyridin-3-
yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-44-1P, N-Isopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-4-oxo-
1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-45-2P,
N-(2,6-Dichloropyridin-4-y1)-1-[3-(1-oxidopyridin-3-y1)pheny1]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-46-3P,
N-Isopropyl-1-[3-(5-carboethoxy-1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-47-4P,
N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-
4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-48-5P,
N-Isopropyl-1-[3-[6-(2-methylpropyl)-1-oxidopyridin-3-yl]phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-49-6P,
N-Isopropyl-1-[3-(6-methyl-1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-50-9P,
N-Cyclopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-51-0P,
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N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-53-2P, N-Cyclopropyl-1-[3-(1-oxidopyridin-4-y1)phenyl]-4-
oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-54-3P,
N-Cyclopropyl-1-[3-(5-bromo-1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-55-4P,
N-Cyclopropyl-1-[[3-[5-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]pyridin-3-yl]phenyl]]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-56-5P, N-Cyclopropyl-1-[[3-[5-[6-(1-hydroxy-1-
methylethyl)pyridin-3-yl]-1-oxidopyridin-3-yl]phenyl]]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-57-6P,
N-Cyclopropyl-1-[[3-[5-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]-1-
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477252-59-8P, N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-
oxidopyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-60-1P, N-Cyclopropyl-1-[3-(6-methyl-1-
oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-61-2P, N-Cyclopropyl-1-[3-(6-methylsulfonyl-1-
oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-62-3P, N-Cyclopropyl-1-[5-bromo-3-[6-(1-
hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-63-4P,
N-Cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-64-5P 477252-65-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (PDE4 inhibitor; preparation of biarylnaphthyridinone PDE4 inhibitors by
   cyclization and arylation of (arylamino) (nicotinoyl) acrylates for
   treatment of asthma and inflammation)
477251-76-6 CAPLUS
1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
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CN

RN 477251-80-2 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-82-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

$$H_2N-S$$
 O
 N
 N
 O
 $C-NH$

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-12-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-17-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-18-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-19-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-37-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-38-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(CAINDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-42-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-(1,6-dihydro-6-oxo-3-pyridinyl)phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-44-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-45-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-46-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (CA INDEX NAME)

RN 477252-47-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo-(CA INDEX NAME)

RN 477252-48-5 CAPLUS

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-56-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(CA INDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-64-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-65-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT